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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/677,342	10/02/2000	Ho-Kyu Choi	678-535 (P9548)	3538

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EXAMINER	
SEGAYE, SABA	
ART UNIT	PAPER NUMBER
2662	6

DATE MAILED: 07/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/677,342	CHOI ET AL.	
	Examiner	Art Unit	
	Saba Tsegaye	2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 May 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *14-18,28,29 and 31* is/are allowed.

6)☒ Claim(s) *1-4,10-13,19,21,27 and 30* is/are rejected.

7)☒ Claim(s) *5-9,20 and 22-26* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 04/27/01 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Objections

2. Claim 30 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 30 depends on claim 27, which is a system claim. However, claim 30 is an apparatus claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 10, 11, 19, 21 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Wang et al. (US 6,587,447).

Regarding claims 1 and 13, Wang discloses a method for transmitting control data on a downlink channel in a base station for a mobile communication system, comprising the steps of:

determining whether the base station has downlink and uplink traffic channel data (column 9, lines 20-28);

driving, if there is no traffic data for a predetermined time period, a random position selector to determine a random gating slot position (column 9, lines 20-28);

gating on control data at the determined gating slot position (column 4, lines 29-42; column 9, lines 20-28); and

gating off control data in other slot positions (column 4, lines 29-42; column 9, lines 20-28).

Regarding claims 2-4, Wang discloses, in Fig. 1B, the method wherein the channel data comprises a series of frames, each frame includes a plurality of slots (16 power control groups), slots in each frame are divided into a plurality of gating slot groups (131, 133, 137, 139), and each gating slot group has a determined gating slot position (135) (column 6, lines 9-35).

Regarding claim 10, Wang discloses, in Fig. 1B, the method wherein the gating on control data includes a pilot symbol (136) and a TPC bit (135) (column 6, lines 9-35).

Regarding claim 11, Wang discloses, in Fig. 1B, the method wherein the gating on control data includes a TPC bit (135) located in the determined gating slot position and a pilot symbol (136) located in a slot previous to the determined gating slot position (column 6, lines 9-35).

Regarding claim 12, Wang discloses the method wherein the base station transmits, if there is no data on the downlink and uplink traffic channel for the predetermined time period, gating information includes a gating start time and a gating rate (column 4, lines3 0-42).

Regarding claim 19, Wang discloses a method for transmitting gated transmission of an uplink dedicated physical control channel slot signal which is formed by a series of frames, each frame including a plurality of slots, for a mobile communication system, comprising the steps of:

receiving gating information indicating gating start time and gating rate from a base station (column 4, lines 30-42; column 6, lines 27-35);

transmitting the DPCCH slot signal form a random pattern for a predetermined duration (column 9, lines1-19).

Regarding claims 21 and 27, Wang discloses a base station transmitter in a mobile communication system, in which traffic channel data and dedicated physical control channel data each are comprised of a series of frames, and each frame includes a plurality of slots, comprising:

a gating position selector for determining a gating slot position when there is no data to transmit on the traffic channel for a predetermined time period (column 9, lines 1-19), and for dividing the slots in each frame into a plurality of gating slot groups, each of the gating slot groups having a ransom gating slot position (column 6, lines 9-35); and

a gated transmission controller for controlling a DPCCH slot corresponding to the selected gating slot position (column 5, lines 29-40).

5. Claims 21 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Padovani et al. (US 5,659,569).

Padovani discloses a base station transmitter in a mobile communication system, in which traffic channel data and dedicated physical control channel data each are comprised of a series of frames, and each frame includes a plurality of slots, comprising:

a gating position selector for determining a gating slot position when there is no data to transmit on the traffic channel for a predetermined time period (column 15, lines 50-61), and for dividing the slots in each frame into a plurality of gating slot groups, each of the gating slot groups having a ransom gating slot position (column 16, lines 30-43); and

a gated transmission controller for controlling a DPCCH slot corresponding to the selected gating slot position (column 10, lines 16-28).

Allowable Subject Matter

6. Claim 5-9, 20 and 22-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 14-18, 28-29 and 31 are allowed.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Andersson et al. (US 6,334,047) discloses an adaptive power control in a mobile radio communications system.

Yuen et al. (US 6,160,803) discloses a high processing gain spread spectrum TDMA system and method.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saba Tsegaye whose telephone number is (703) 308-4754. The examiner can normally be reached on Monday-Friday (7:30-5:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (703) 305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ST
June 25 2004

JOHN PEZZLO
PRIMARY EXAMINER